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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/652,023	08/31/2000	Yasuhiro Wakimoto	P108391-00011	4533

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Arent Fox Kintner Plotkin & Kahn PLLC  
1050 Connecticut Avenue NW  
Suite 600  
Washington, DC 20036-5339

EXAMINER

CHOI, WOO H

ART UNIT

PAPER NUMBER

2186

DATE MAILED: 05/13/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/652,023

Applicant(s)

WAKIMOTO, YASUHIRO

Examiner

Woo H. Choi

Art Unit

2186

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 31 August 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-116 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 August 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Claim Rejections - 35 USC § 112*

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 2, 4, 5, 8, 12, and 13 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

3. Claims 2, 5, 8, and 13 recite the limitation "said load module stored in said second memory unit" in lines 1-2 of the claims. There is insufficient antecedent basis for this limitation in the claim. The parent claims state that the "load module" is stored in the first memory unit and that the "instruction code" is copied in the second memory module.

4. With respect to claims 4 and 12, while applicant may be his or her own lexicographer, a term in a claim may not be given a meaning repugnant to the usual meaning of that term. See *In re Hill*, 161 F.2d 367, 73 USPQ 482 (CCPA 1947). The term "storage unit" in claims 4 and 12 are used by the claims to mean "unit that stores data or storage means" while the accepted meaning is "the length of an addressable element of storage in the machine, measured in bits" according to The Authoritative Dictionary of IEEE Standards Terms, published by IEEE. It is

Art Unit: 2186

suggested that the term "storage unit" be changed to "storage device", "storage means", or some other term with the same meaning.

5. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

6. Claims 4 and 12 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Storage units or devices are units into which data can be entered, held, and retrieved at a later time. However, the claims include a storage unit that "stores" an instruction code from one memory unit to the second memory unit, both of which are external to the storage unit. It seems that an act of "storing", by such a storage unit, in actuality is an act of copying or transferring of data from one memory unit to another. The specification does not disclose such a storage unit. Nor does it describe how such a storage unit transfers, or copies, data from one memory unit to another.

***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

Art Unit: 2186

having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 1 – 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Maruyama *et al.* (US Patent Application Publication # US 2001/0003199 A1) in view of Dye (US Patent # 6,173,381).

9. With respect to claims 1, 4, 7, and 12, Maruyama *et al.* disclose a microprocessor to which a plurality of memory units having physical addresses different from each other are externally connected that comprises:

an address conversion unit (figure 1) which assigns a physical address of a first memory unit (12) out of the plurality of memory units to a logical address of a load module stored in the first memory unit (figure 3); and

a copying unit which copies an instruction code from the load module stored in the first memory unit to a second memory unit of the plurality of memory units (claim 2); and

an address conversion unit which assigns a physical address of the second memory unit (14) to a logical address of the instruction code to the second memory unit (figure 3).

However, Maruyama *et al.* do not disclose the use of two address conversion units to assign physical addresses of the first and the second memory units to their respective logical addresses. On the other hand, Dye teaches us the use of two address conversion units (Dye, figure 3, 140a and 140b) to control different banks of memory units.

Art Unit: 2186

It would have been obvious to one of ordinary skill in the art, having the teachings of Maruyama *et al.* and Dye before him at the time the invention was made, to modify the microprocessor of Maruyama to have two separate address conversion units as taught by Dye, in order to be able to address a large amount of memory (Dye, col. 11, lines 43-50) that may be required for image processing.

10. With respect to claims 2, 5, 8, and 13, the address conversion unit assigns the physical address of the first memory unit to the logical address of the load module and the physical address of the second memory unit to the logical address of the instruction code (figure 3).

11. With respect to claims 3, 6, 9, and 14, the first memory unit includes data for image processing and instruction code for image processing (page 3, paragraph 42, line 9-13)

12. With respect to claims 10, 11, 15 and 16, the speed of the second memory module is faster than the first memory module (page 1, paragraph 9, lines 1-2) and the second memory is constituted of a synchronous DRAM (figure 1).

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Woo H. Choi whose telephone number is (703) 305-3845. The examiner can normally be reached on M-F, 8:00-4:30.

Art Unit: 2186


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matt Kim can be reached on (703) 305-3821. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 746-7239 for regular communications and (703) 746-7238 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

*whc/MSA*

whc

May 8, 2002

  
MATTHEW KIM  
SUPERVISORY TENT EXAMINER  
TECHNOLOGY CENTER 2100